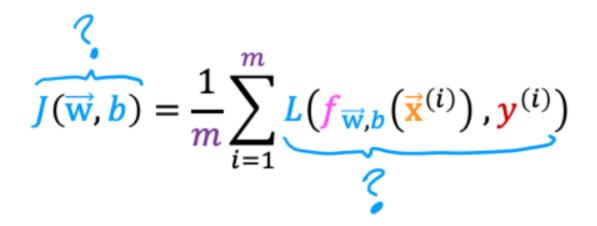
Your latest: 100% • Your highest: 100% • To pass you need at least 80%. We keep your highest score.

1/1 point



- 1. In this lecture series, "cost" and "loss" have distinct meanings. Which one applies to a single training example?
 - ✓ Loss

⊘ Correct

In these lectures, loss is calculated on a single training example. It is worth noting that this definition is not universal. Other lecture series may have a different definition.

- ☐ Cost
- Both Loss and Cost
- Neither Loss nor Cost

1/1 point

Simplified loss function

$$L(f_{\overrightarrow{w},b}(\overrightarrow{x}^{(i)}), y^{(i)}) = \begin{cases} -\log(f_{\overrightarrow{w},b}(\overrightarrow{x}^{(i)})) & \text{if } y^{(i)} = 1\\ -\log(1 - f_{\overrightarrow{w},b}(\overrightarrow{x}^{(i)})) & \text{if } y^{(i)} = 0 \end{cases}$$

$$L(f_{\overrightarrow{w},b}(\overrightarrow{x}^{(i)}), y^{(i)}) = -y^{(i)}\log(f_{\overrightarrow{w},b}(\overrightarrow{x}^{(i)})) - (1 - y^{(i)})\log(1 - f_{\overrightarrow{w},b}(\overrightarrow{x}^{(i)}))$$

- **2.** For the simplified loss function, if the label $y^{(i)}=0$, then what does this expression simplify to?
 - $\bigcirc \ \log(f_{ec{w},b}(\mathbf{x}^{(i)})$
 - \bigcirc $-\log(1-f_{\vec{\mathbf{w}},b}(\mathbf{x}^{(i)}))$
 - $\bigcirc \ \log(1-f_{ec{\mathbf{w}},b}(\mathbf{x}^{(i)})) + log(1-f_{ec{\mathbf{w}},b}(\mathbf{x}^{(i)}))$
 - $\bigcirc -\log(1-f_{\vec{\mathbf{w}},b}(\mathbf{x}^{(i)})) log(1-f_{\vec{\mathbf{w}},b}(\mathbf{x}^{(i)}))$
 - **⊘** Correct

When $y^{(i)}=0$, the first term reduces to zero.